

U.S. Fish & Wildlife Service

## Alpena FRO Accomplishment Report

### Aquatic Species Conservation and Management

#### Goby Angling Survey on Shiawassee NWR



Alpena FRO and Shiawassee NWR hosted an angling survey to document the native fish community and to look for the presence of round goby in refuge waters on September 13. The round goby is a nuisance fish species that was accidentally introduced to the Great Lakes in 1990. It is a prolific spawner allowing it to become very abundant and has since spread to many areas around the Great Lakes. The goby was found in the upper reaches of the Shiawassee and Flint Rivers and has been found at the mouth of the Saginaw River.

There was some question as to whether it was impacting native fisheries on the Shiawassee NWR. In 1999 angling surveys were conducted to look for the goby in refuge waters. No goby were found. The survey was repeated in 2003 to determine if the goby had reached the refuge over time. Rebecca Goche and Doug Spencer (Shiawassee NWR) and Anjanette Bowen (Alpena FRO) coordinated the event with volunteers. Two stretches of the Cass River and Spaulding Drain (Flint River) were surveyed. Low water levels prohibited sampling on the Shiawassee River. It was good that no goby were captured. Freshwater drum and channel catfish were the most common species captured. The Service is responsible for ANS surveillance, monitoring, early detection, and educational activities in the Great Lakes. Shiawassee NWR is Service land protected and managed for the benefit of fish and wildlife. Efforts were made to preserve and document the native fish community and to detect the presence of nuisance invasive species. The Cass River and Spaulding Drain on Shiawassee NWR were surveyed for round goby with angling gear in cooperation with refuge staff and volunteers.

*Anjanette K. Bowen*

#### Juvenile Lake Sturgeon Research in Southern Lake Huron



Fishery Biologist James Boase from the Alpena FRO and Fishery Technician Joe Tetreault from Ontario Ministry of Natural Resources visited Point Edward, Ontario on September 11 to work with commercial fishers from Purdy Fisheries Inc. The goal of the visit was to collect juvenile lake sturgeon, implant them with an ultrasonic transmitter, and then release them back in Lake Huron. Purdy Fisheries has consistently captured juvenile

lake sturgeon while fishing for yellow perch during the fall fishing season. Review of the

catch logs provided by Purdy Fisheries revealed that the juveniles are consistently captured in the fall in the same relative location year after year. Although no lake sturgeon were captured during that fishing event information about the area was collected including; range of depth, water temperature range, and substrate composition. If enough juvenile lake sturgeon are collected during the next few weeks, fish will be implanted with ultrasonic transmitters and released. Information derived from the implanted fish will greatly enhance our understanding about the habitat requirements of juvenile lake sturgeon in southern Lake Huron and the St. Clair River and has direct application to other areas of the Great Lakes. The trip to Point Edward provided an excellent opportunity for Boase to work and interact with commercial fishers and biologists from Ontario. Maintaining this cooperative relationship with the commercial fishers and Canadian biologists has been vital to lake sturgeon rehabilitation efforts taking place in this region of the Great Lakes. The visit also provided the opportunity to explain the Service's mission and efforts to restore native fish. In addition, knowledge gained from the trip will aid the Service in focusing its energy and limited resources in our efforts to rehabilitate lake sturgeon in the Great Lakes.

*James C. Boase*

### **Goby Impacts on Lake Trout Investigated**

Staff from the Alpena FRO completed round goby sampling on a near shore Lake Huron lake trout reef during the month of September. The purpose for the sampling is to determine if goby are a potential impediment to lake trout rehabilitation. Round goby are an aggressive bottom dwelling fish that negatively impact native species through their competition for food and habitat, egg predation, and rapid proliferation. The study is funded by a grant from the EPA's Great Lakes National Program Office and is designed to determine if round goby are consuming lake trout fry or eggs. Goby were captured using baited setlines and minnow traps. Due to unseasonable cold water temperatures only 14 fish were captured during the two day sampling event. The Service has responsibility for aquatic nuisance species control and monitoring and native species restoration for lake trout in the Great Lakes. The information gathered from this project will assist the Service with its efforts to rehabilitate lake trout in Lake Huron.

*Tracy D. Hill*

### **Aquatic Nuisance Species Surveillance Completed on Lake Huron**



The Service's Alpena FRO completed bottom trawling surveillance for aquatic nuisance species including Eurasian ruffe, round goby, and others at eight Lake Huron ports in cooperation with the Marquette Biological Station during the week of September 15. Lake Huron ports and shipping lanes from the St. Marys River to the Saginaw River were surveyed. Both Eurasian ruffe and round goby, two invasive nuisance fish species from Eurasia, were found in Lake Huron during the mid-1990's. Both species are prolific spawners, allowing them to become abundant quickly, and are thought to compete with native species for food and habitat. Surveillance

efforts targeting these and other non-native nuisance species are conducted to locate any newly established populations, to examine existing populations, and gather baseline information in areas where invasives have not yet been established. The round goby has spread to many areas around Lake Huron; however, the Eurasian ruffe has only been found in Thunder Bay near Alpena, Michigan. No new populations were discovered during surveillance efforts in 2003 and existing populations of round goby continue to persist. Many thanks to the Marquette Biological Station in Marquette, Michigan who provided a trawling vessel and operator for our 2003 surveys. The Service is mandated to provide ANS surveillance and monitoring on the Great Lakes. Eight Lake Huron ports and shipping areas were surveyed for the presence of ANS to detect any new populations. Alpena FRO is the Service office responsible for ANS surveillance in US waters of Lake Huron.

*Anjanette K. Bowen*

### **Lake Huron Lake Whitefish Planning Meeting**

Project Leader McClain, Treaty Fisheries Unit Leader Woldt and Biologist Koproski traveled to Port Huron for a September 8-9 lake whitefish planning meeting. Alpena FRO is collaborating on a lakewide Lake Huron whitefish tagging project to better delineate stocks around the basin. Objectives of the meeting were to finalize the overall study plan, coordinate work to be initiated in the fall of 2003, and to discuss standardization of ageing protocol to be used by participants in the study. Lake whitefish will be tagged during the spawning season at strategic locations on the main basin of Lake Huron and tag recoveries used to define stock distribution, movement and fidelity to spawning reefs. Multi-agency collaboration and cooperation is essential to complete this large-scale, 3-year study. Completion of the study should greatly enhance our understanding of the Lake Huron whitefish stocks and allow for better modeling and harvest management. This data need has been identified by the Modeling Sub-Committee of Technical Fisheries Committee for harvest management in 1836 Treaty waters of Lake Huron. Partners involved in the project include the Service, Michigan Department of Natural Resources, Chippewa-Ottawa Resource Authority, Ontario Ministry of Natural Resources, Chippewas of Nawash, Saugeen Ojibwe, Cape Croaker Band, and Bruce Power Company. Better understanding the size, distribution, and the nature of mixing and/or segregation of Lake Huron lake whitefish stocks will greatly improve interagency management of this commercially important species. This effort is consistent with Service priorities regarding management of interjurisdictional fish and partnerships and accountability.

*Jerry R. McClain*

## **Aquatic Habitat Conservation and Management**

### **Wrapping up the Fiscal Year**

The Alpena FRO Partners for Fish and Wildlife (Partners) Program Coordinator Enterline completed reporting through the Habitat International Tracking System (HabITS) for FY2003. Although the system has been improved, every aspect of the Partners Program must be accounted for through this labor-intensive system. Projects spanned from wetland restoration, to streambank restoration projects, to in-stream fisheries habitat improvement projects, to fish passage projects at road/stream crossings. Technical

assistance to private landowners and Department of Agriculture Programs were reported as well. Field work activity levels were high during September. Three large road crossing projects began in September due to the low water levels in Montmorency, Cheboygan, and Otsego Counties (Michigan). Two of the three projects will be completed by the end of October, the third by the end of November. September was a very busy, but productive month. Reporting was completed for 11 wetland restoration sites totaling 44 acres, 3 road crossing sites opening 41 miles of coldwater habitat to fish passage, 61 beaver dams were removed opening 45 river-miles, approximately 200 fish habitat structures were placed improving 20 miles of in-stream habitat, and stream bank erosion sites were restored in two watersheds totaling restoration on 8 river-miles. Technical assistance was given to private landowners on approximately 20,000 acres of private land in Northern Michigan.

*Heather L. Enterline*

### **Celebrating The Centennial Through Habitat Restoration**



The Alpena Fisheries Resources Office (FRO) and Ottawa National Wildlife Refuge (NWR) hosted a refuge centennial event on September 20 as part of National Public Lands Day that included a small scale habitat restoration project. A group of volunteers applied bank stabilization techniques along one hundred feet of Crane Creek using soft engineering. Crane Creek is a low gradient stream which flows through the refuge and empties into Lake Erie through a flooded river mouth. The creek

provides habitat for migratory birds, and lake fish species. It is a vital component to the refuge and the Lake Erie system. This project utilized methods of stabilization which will enhance the habitat and reduce sedimentation into the creek without the use of large rock. Materials utilized for this project included coconut filter fabric, coir logs, and native live plants and seed mixes. The materials used are completely biodegradable, within a 5 -10 year span, after the vegetation has been established. Biologist Susan Wells and Public Use Specialist Rebecca Hinkle planned this as a refuge centennial event to allow people the opportunity to become involved in habitat management of a small portion of the refuge. The people involved with the project responded with positive attitudes towards the restoration project and enjoyed the opportunity for the hands on work. This is an opportunity which is not usually offered to the public and their efforts can be viewed from the walking trails. A sign will be erected commemorating their efforts. The event was such a success that there have been requests to repeat the project next year. Some of the volunteers have offered material for this project if repeated. Plans have already begun between the Alpena FRO and Ottawa NWR to repeat the project on a larger scale in 2004. This accomplishment provided multiple resource outcomes by integrating educational and outreach opportunity with on the ground restoration. Ten volunteers participated in the event.

*Susan E. Wells*



## **Cooperation with Native Americans**

### **Service Co-Chairs Modeling Subcommittee Meeting for 1836 Treaty Waters**

Fishery Biologist Aaron Woldt of the Alpena FRO attended and co-chaired the September 16-18 meeting of the Modeling Subcommittee (MSC) of the Technical Fisheries Committee (TFC). The primary focus of this meeting was to generate preliminary 2004 harvest limits for lake whitefish in 1836 Treaty waters of lakes Huron, Superior, and Michigan, although other technical matters were discussed. As stipulated in the 2000 Consent Decree, preliminary lake whitefish harvest limits must be calculated by the MSC, reviewed by the TFC, and presented to the parties to the decree by November 1 each year. The 2000 Consent Decree is a 20 year fishery allocation agreement for 1836 Treaty waters signed by the State of Michigan, United States, Bay Mills Indian Community, Sault Ste. Marie Tribe of Chippewa Indians, Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, and Little Traverse Bay Bands of Odawa Indians. In addition to performing lake whitefish model analyses, Biologist Woldt ran the MSC meeting ensuring all agenda items were discussed and kept meeting minutes. A preliminary draft of the September 16-18 MSC meeting minutes was mailed to MSC members for review. Preliminary lake whitefish harvest limits were presented to the TFC for review on October 8. The MSC will complete final lake whitefish harvest limits and present them to the parties by December 1 as stipulated in the Decree. Harvest limits produced at this meeting, when reviewed by the parties and finalized, will become binding 2004 lake whitefish harvest limits for 1836 Treaty waters. These harvest limits will allow lake whitefish fisheries to be executed while still protecting the biological integrity of the lake whitefish stocks. This outcome is consistent with the Service's goal of building and maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities.

*Aaron P. Woldt*

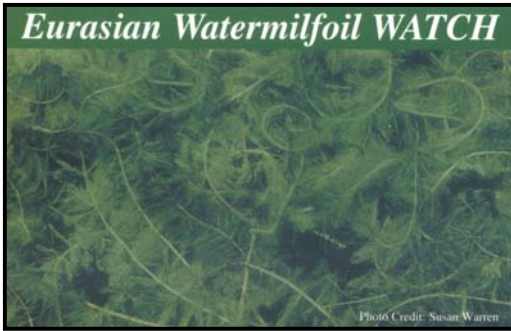
### **Alpena FRO Assists CORA with Walleye Assessments in 1836 Treaty Waters**

During the week of September 22, 2003, Fishery Biologist Scott Koproski of the Alpena FRO traveled to Sault Ste. Marie, MI, to assist the Chippewa Ottawa Resource Authority (CORA) with their annual walleye assessments. CORA stocks walleye at various locations in the St. Marys River, and the Alpena FRO provides an electrofishing vessel and operator to electrofish the stocking locations. This annual sampling helps CORA measure the effectiveness of their stocking efforts. Koproski and CORA staff successfully sampled three stocking locations. A fourth stocking site was not assessed due to inclement weather. Alpena FRO staff have been assisting CORA with their annual walleye assessment for the past 11 years. In addition to providing assistance to tribal resource agencies, the assessment of walleye in the St. Marys River is another example of Alpena FRO's commitment to native fish conservation and assessment. Walleye are an important recreational and commercial fish species in Lake Huron. Alpena FRO will continue to evaluate stocking efforts of CORA in the future as requested.

*Scott R. Koproski*

## Partnerships and Accountability

### Eurasian Watermilfoil Poses Problem in Northeastern Michigan



Anjanette Bowen of the Alpena FRO represented the Service and participated in a public meeting to discuss Eurasian watermilfoil problems in Fletcher Pond, a fishing hotspot in northeastern Michigan. The meeting was hosted by the Thunder Bay Audubon Society and included participants from Thunder Bay Power, Lake Huron Advisory Council, Huron Pines RC&D, SePRO Corporation, Aquatic Control, NEMCOG, and Fletcher Pond Resort Owners.

Eurasian watermilfoil is an aquatic nuisance species that is prolific and detrimental to navigation and fish and wildlife populations. Presentations were provided on the nature of the Eurasian watermilfoil problem at Fletcher Pond, control options, current control projects in other areas - including use of the native milfoil weevil, and potential for control of Fletcher Pond with chemical agents including Sonar. The meeting was intended to better inform the general public on the issue. The Service seeks to provide aquatic nuisance species education and prevention and participate in meetings to stay abreast of rising ANS issues where they are found. Alpena FRO will participate with community and fishery management agencies to address the Eurasian watermilfoil issue at Fletcher Pond.

*Anjanette K. Bowen*

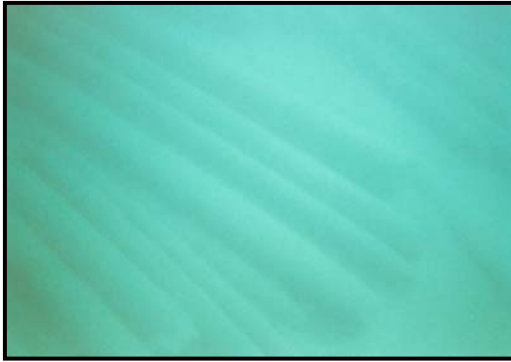
### Alpena FRO Provides Technical Assistance to USGS

During the month of September, Fishery Biologist Scott Koproski was contacted by Chuck Madenjian of the USGS Great Lakes Science Center to assist with ageing burbot otoliths from Lakes Michigan and Huron. Madenjian has been collecting burbot for three years in an attempt to identify growth characteristics of Great Lakes burbot populations. Biologist Koproski has extensive experience ageing otoliths, and Madenjian provided samples to Koproski for analysis. Koproski used the crack and burn technique to identify annuli formation within 82 pairs of otoliths. Age data was then provided to Madenjian for analysis. Burbot are a native Great Lakes species. This work is an example of Alpena FRO staff developing partnerships with other federal agencies to enhance native fish species. Although burbot are not a highly prized fish species by commercial or recreational fishers, they are an important native species that needs to be monitored and protected.

*Scott R. Koproski*

### Suspected Shipwreck Investigated

Staff from the Alpena FRO assisted Thunder Bay National Marine Sanctuary and Underwater Preserve personnel with investigation of a suspected ship wreck in Lake Huron's Thunder Bay. The site was discovered from side scan sonar surveys conducted by the Office of Coastal Survey during August 2003. Assistant Project Leader Tracy Hill and Fishery Biologist Adam Kowalski assisted by transporting Sanctuary gear and personnel to the site on the Alpena FRO research vessel. Sanctuary Archeologist and



Education Coordinator took pictures and inventoried the location and distribution of the suspected wreck on the lake bottom. The site was actually comprised of several thousand pine logs of various lengths and diameters. It is suspected that a cargo was accidentally or intentionally dumped at the location. Inventory of this side scan sonar target was part of a larger inventory of shipwrecks and underwater artifacts within the newly established Thunder Bay National Marine Sanctuary and

Underwater Preserve. The Sanctuary was established in 2001 to ensure the protection of cultural artifacts within the Sanctuary boundaries. Participation in this task allowed the Alpena FRO to strengthen its partnership with another federal agency for completion of a project that will help educate the public about some of the recreational opportunities within the Great Lakes.

*Tracy D. Hill*

#### **Alpena FRO Participates in Great Lakes Fishery Institute Hosted by Sea Grant**



**Great Lakes Sea Grant  
Fisheries Leadership Institute**

Anjanette Bowen of the Service's Alpena Fishery Resources Office (FRO) presented information on the station's activities, roles, and a review of aquatic nuisance species

in Lake Huron at the Great Lakes Fishery Institute hosted by Sea Grant in Alpena, MI on September 27. The Great Lakes Fishery Institute provides community leaders dealing with fishery issues an opportunity to learn about various fishery programs from management agencies and others who contribute to the fishery resource. Bowen presented 2 Power Point presentations and provided handouts for the class. A small group of 7-10 participants allowed interaction and vibrant discussion. The presentations were well received and spurred interest on behalf of the participants. Sea Grant is a leader in providing educational programs about environmental issues across the Great Lakes and nation. These presentations provided an excellent opportunity to increase the visibility of the Service, reflect on the Service's role as a leader in fishery issues, and provide public education about fishery and natural resources issues.

*Anjanette K. Bowen*

## **Public Use**

### **Discover Our Wild Side**

Assistant Project Leader Tracy Hill participated in the National Wildlife Refuge Centennial Celebration at the Detroit River International Wildlife Refuge on September 26 and 27. The event began on September 26 with over 900 3rd through 6th graders from the greater Detroit area visiting the refuge. While visiting the refuge, students progressed through four educational booths staffed by Erie MetroParks and Service personnel. The booths educated students about unique wildlife and plants that can be observed on the Celebration on September 27 included comments from the Detroit River International



Wildlife Refuge.  
Opening  
Ceremonies for  
the Centennial  
Secretary of the  
Interior Gail  
Norton, US  
Congressman  
John Dingell, and

US Fish and Wildlife Service Director Steve Williams. The Service had numerous displays for the purpose of educating Centennial participants. Alpena FRO Outreach Coordinator Susan Wells developed two games to educate children about the biology of salmon and lake sturgeon. Fishery Biologist Jim Boase developed educational poster presentations to inform Centennial participants about lake sturgeon restoration efforts taking place in the Detroit River. Live lake sturgeon were on display at the event complements of the Genoa National Fish Hatchery. Approximately 3,000 people participated in the celebration. Participation in this event allowed the Alpena FRO to fulfill the Fisheries Program goal of improving partnerships and developing collaborative conservation strategies for aquatic species. Specifically it will benefit the restoration efforts of lake sturgeon in the Detroit River.

*Tracy D. Hill*

### **52nd Annual Posen Potato Festival Parade**



Staff from the Alpena FRO participated in the 52nd Annual Posen Potato Festival Grand Festival Parade on September 7, 2003. Fishery Biologists Aaron Woldt, Tracy Hill, and Adam Kowalski towed Alpena FRO's Great Lakes Survey vessel *R/V Karegnondi* along the 1.5 mile long parade route and distributed USFWS brochures, children's coloring books, and

candy to thousands of spectators. Alpena FRO's truck and vessel were decorated with American flags, USFWS emblems, and Alpena FRO placards. This parade was a wonderful opportunity for Alpena FRO staff to interact with large numbers of local community members and provide information regarding the Service's goals and roles regarding natural resource protection, rehabilitation, and management. The Potato Festival Parade is a unique outreach event that allows the Alpena FRO to meet and interact with large numbers of local community members and provide them information about Service programs. This outcome is consistent with the Service's goal of implementing educational and outreach activities to educate public regarding Service activities.

*Aaron P. Woldt*

### **Baby Lake Sturgeon Displayed During Centennial Event at Lake Erie Metropark**

Fishery Biologist James Boase traveled to Gibraltar, Michigan on September 26 and 27, 2003 to staff the Service's fishery display booth at Lake Erie Metropark. The display was one segment of the centennial celebration for the Detroit River International Wildlife





Refuge. The display consisted of one aquarium housing 6 month old lake sturgeon and a display wall with posters describing lake sturgeon life history, threats to survival, and current habitat construction taking place in the Detroit River. Approximately 600 visitors ranging in age from young children to senior citizens visited the display during those two days. Boase answered questions from the general public and from other professionals attending the event. Most questions pertained to fisheries research and the health of the Great Lakes. The forum was an excellent opportunity for Boase to explain how the Alpena FRO is working with other Service program staff, natural resource agency biologists, recreational anglers, and commercial fishers from both Canada and the US in efforts to improve the health of the Great Lakes. The event provided Boase an opportunity to interact with the public and other members of the Service from this region. This event provided a unique opportunity to explain to the public the Service's mission and efforts to restore native fish and our efforts to control exotics in the Great Lakes. Specifically, answers to posed questions focused on efforts to rehabilitate lake sturgeon populations in the Great Lakes and the role Fishery Resources Offices have in this endeavor. Benefits of native species restoration was clearly defined and explained, as well as the negative impacts that exotic species have on that effort. The event was an excellent outreach opportunity.

*James C. Boase*

## **Leadership in Science and Technology**

### **Aging Scales**



During the month of September, Fishery Biologist Adam Kowalski aged all scale samples collected during the spring fishery independent lake whitefish survey conducted by the Alpena FRO. To age scales, Alpena FRO uses Image Pro Plus software which allows a digital camera connected to a dissecting scope to take pictures of the scales and display them on a computer screen. A picture of every scale is taken and electronically archived for future reference. After the picture is taken, the software allows the ager to place marks on the scale to label annuli. These marks are then saved separately from the scale image. This is done so that multiple agers can read the same scale and compare age assignments. From the spring lake whitefish assessment there was a combined total of 473 lake trout, lake whitefish, and round whitefish samples to be aged. All of these aged samples will be used in lake trout and lake whitefish models used to calculate harvest limits for the 2004 lake trout and 2005 lake whitefish fishing seasons in 1836 Treaty waters. Lake trout and lake whitefish age data are used in population models that determine lake trout and lake whitefish harvest limits for parties to the Year 2000 Consent Decree. Ageing these samples is critical to meeting the Service's goal of building and maintaining self-sustaining populations of native fish

species while providing recreational fishing opportunities and meeting the needs of tribal communities.

*Adam T. Kowalski*

## **Workforce Management**

### **Flotation Purchase**

During the month of September, Fishery Biologist Adam Kowalski organized the purchase of personal flotation equipment for Alpena FRO staff. This order keeps the office in compliance with DOI Safety Policy 485 DM 22.4, which now requires properly fitted anti-exposure gear for all employees when air and water temperatures sum to less than 100° F. Biologist Kowalski inventoried current station PFD's, retired unserviceable gear, and determined what pieces were needed for each person to have their own float coat, life vest, and anti-exposure suit. Kowalski obtained sizes of each person and provided examples of various sizes of each PFD for personnel to try on to ensure proper fit of new gear. Biologist Kowalski then placed the group order for Alpena FRO with Mustang Survival. Resource Outputs/Outcomes By purchasing flotation gear to comply with Safety Policy 485 DM 22.4, the office is providing employees with equipment needed to effectively, efficiently, and safely perform their jobs consistent with Service goals.

*Adam T. Kowalski*